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and the upper substrate 20 to each other, to avoid the exudation of the transparent adhesion layer, and further protect and package the organic light emitting component 30. In this embodiment, the structure of the nano silver sensing layer 40" is different from the nano silver sensing 5 layer 40 in the first preferred embodiment. Please refer to FIG. 6, FIG. 6 is a schematic diagram showing the nano silver sensing layer 40" of FIG. 5. The nano silver sensing layer 40" comprises a third insulating layer 71, having an upper surface 72 relatively far away from the organic light 10 emitting component 30 and a lower surface 73 relatively closer to the organic light emitting component 30, a first nano silver electrode layer 74 disposed on the upper surface 72, a second nano silver electrode layer 76 disposed on the lower surface 73. The first nano silver electrode layer 74 15 includes a plurality of striped-shaped first electrodes 741 arranged along a first direction and parallel to each other. The second nano silver electrode layer 76 includes a plurality of striped-shaped second electrodes 761 arranged along a second direction and parallel to each other. The first 20 electrodes 741 and the second electrodes 761 are crossed to each other. Similarly, a third protection layer 77 and a fourth protection layer 78 are formed on the first nano silver electrode layer 74 and on the second nano silver electrode layer 76 respectively, to prevent the first nano silver elec- 25 trode layer 74 and the second nano silver electrode layer 76 from experiencing oxidation. The third protection layer 77 and the fourth protection layer 78 comprise a plurality of via holes 79 disposed corresponding to the end portion of each first electrode 741 and each second electrode 761, to expose 30 parts of each first electrode 741 and parts of each second electrode 761. It is worth noting that third protection layer 77 and the fourth protection layer 78 mentioned above can be a single layer structure or a multiple layer structure. Besides, within the periphery region of the third protection 35 layer 77 and the fourth protection layer 78, a plurality of traces 62 are disposed, wherein one terminal of each trace 62 is electrically connected to the corresponding first electrode 741 or the corresponding second electrode 761 through the via holes 79, and another terminal of each trace 62 is 40 electrically connected to a controller (not shown) disposed outside, to transfer the signals from the touch panel to the controller.

In this embodiment, the material of the third insulating layer 71 can be selected from the flexible materials, similar 45 with the first preferred embodiment or the second preferred embodiment, it can be selected from a group of epoxy. modified epoxy, polyester, acrylic, fluorocarbon polymers, polyphenylene oxide, polyimide, phenolic resins, polysulfones, silicone-polymer resin, BT resin, cyanate poly poly- 50 ethylene, polycarbonate resin, acrylonitrile-butadiene-styrene copolymer, polyethylene terephthalate, polyethylene terephthalate, polybutylene terephthalate, liquid crystal polymers, polyamides, nylon 6, copolymerized formaldehyde, polyphenylene sulfide and cyclic olefin copolymer. 55 Furthermore, the arrangement direction of the first electrode 741 and the second electrode 761 are not limited by the embodiment mentioned above, and can be adjusted according to actual requirements, any symmetry and repeated patterns can be arranged regularly.

In the third embodiment of the present invention, the nano silver sensing layer 40" only comprises single insulating layer, the first nano silver electrode layer 74 and the second nano silver electrode layer 76 are disposed on the upper surface 72 and on the lower surface 73 of the third insulating 65 layer 71 respectively, thereby decreasing the weight and the thickness of the touch panel. Besides, the nano silver is used

as the material for forming the first nano silver electrode layer 74 and the second nano silver electrode layer 76, to achieve the demands for high transmittance and rapid scanning in a large-size product. In addition, the first nano silver electrode layer 74 and the second nano silver electrode layer 76 can be conformally formed on the third insulating layer 71. The other components, material properties, and manufacturing method of the touch panel 3 are similar to the first preferred embodiment detailed above and will not be redundantly described.

In summary, the present invention combines the touch panel and the display device into one structure, to achieve the requirement for forming a lightened and thinned touch panel. On the other hand, the nano silver is used to replace the ITO to form the electrodes, since the nano silver has better flexibility and conductivity than ITO, it can be formed on flexible substrate (such as PET) easily, and achieve the demands for rapid scanning in a large-size product. By adjusting the concentration of the nano silver liquid, the conductivity of the nano silver electrodes therefore can be adjusted, so the flexible, large-size and having low resistance electrodes touch panel can be made. Besides, except for the transparent adhesion, the nano silver sensing layer and the upper substrate are also disposed on the organic light emitting component, wherein the nano silver sensing layer further comprises the insulating layer, to protect the organic light emitting component, therefore increasing the stability of the touch panel.

Those skilled in the art will readily observe that numerous modifications and alterations of the device and method may be made while retaining the teachings of the invention. Accordingly, the above disclosure should be construed as limited only by the metes and bounds of the appended claims.

What is claimed is:

- 1. A touch panel, comprising:
- a lower substrate;

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- an organic light-emitting component, disposed on the lower substrate;
- a nano silver sensing layer, disposed on the organic light emitting component, wherein the nano silver sensing layer comprising:
 - a first insulating layer, disposed on the organic light emitting component;
 - a first nano silver electrode layer, disposed on the surface of the first insulating layer;
 - a second insulating layer, disposed on the first nano silver electrode layer; and
 - a second nano silver electrode layer, disposed on the surface of the second insulating layer, wherein the first nano silver electrode layer includes a plurality of first electrodes, the second nano silver electrode layer includes a plurality of second electrodes, and the first electrodes and the second electrodes are crossed to each other;
- an upper substrate, disposed on the nano silver sensing
- a plurality of protection layers disposed on the first nano silver electrode layer and the second nano silver electrode layer respectively, wherein each protection layer includes a plurality of via holes to expose parts of each of the plurality of first electrodes and parts of each the plurality of second electrodes.
- 2. The touch panel of claim 1, wherein the first insulating layer and the second insulating layer are composed of flexible materials, and the flexible materials are selected from the group consisting of epoxy, modified epoxy, poly-